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A CHECKLIST OF THE BIRDS OF HAIGAM RAKH, KASHMIR¹

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Haigam Rakh is the largest remaining reedbed area in Kashmir. It is maintained by the Jammu and Kashmir Department of Game as a duck shooting reserve, and as such its wintering wildfowl are likely to be well documented. Recent expeditions in July-August, 1978, July-September, 1983 and September, 1984 have shown the area to be of major ornithological importance at other times of the year. Many marshland species breed in the reserve, and the densities of Little Bittern (*Ixobrychus minutus*), Water Rail (*Rallus aquaticus*), Common Kingfisher (*Alcedo atthis*) and Clamorous Reed Warbler (*Acrocephalus stentoreus*) are particularly high. The area is important for autumn migrants, with 45% of the species recorded being passage birds and/or winter visitors. Such species include many waders, wagtails and hirundines which roost in large numbers in the reedbed, and several other short- and long-distance migrants. It is considered that Haigam Rakh is of sufficient ornithological interest to merit further long-term study. We are optimistic that the reserve can be managed so as to maintain its value to the local people, its winter duck shooting and its importance to breeding and migrant birds.

INTRODUCTION

The Vale of Kashmir is a large basin at a height of c 1600 m which forms the flood plain of the river Jhelum. It is surrounded by mountains — to the south and west the Pir

Panjal Range, to the north the Karakoram and to the east the Ladakh Range. On the side facing the Vale, these mountains are all heavily forested with conifers, although much logging has taken place. The Vale is now largely devoted to agriculture, especially rice paddy and orchards.

The ecology of the Vale has changed markedly since the publication of Bates & Lowther (1952). Haigam (= Hygam) Rakh is the largest remaining reedbed area. Situated at the

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southern end of Lake Wular, the nearest main town is Sopore, but the Rakh is surrounded by villages. It is maintained by the Jammu and Kashmir Department of Game as a duck shooting reserve. The reserve area is about 14 km² (Pandit 1982), about 4 km² of which is reedbed.

The Rakh is largely covered by a dense growth of reed and other emergent species. The commonest macrophyte species are Common Reed *Phragmites communis*, Bulrush *Typha angustata*, Bur-reed *Sparganium erectum*, club rushes *Scirpus lacustris* and *S. palustris*, Spike Rush *Eleocharis palustris* and sedges *Carex* spp. (Kaul *et al.* 1980, Kaul 1982, 1984). In open areas there are various floating leaf species including the water lilies *Nymphaea stellata* and *N. alba*, Fringed Water Lily *Nymphaoides pellata* and Water Chestnut *Trapa natans* (Kaul *et al.* 1980). Vegetation grows either from the bottom of shallower areas or from a floating mat of roots and silt. The reedbed is partitioned by a number of boat channels varying in width from 1 m to 4 m. Water in the Rakh varies in depth up to about 1 m.

The reserve is largely surrounded by a protective bank. Inside this bank, a strip of willows has been planted. These act as a silt trap, but when full grown will also supply the villagers with many useful materials — leaves for cattle feed, sticks and wood. There is no understorey in this plantation since all the lower vegetation is heavily grazed. Outside the bank, and in some places inside, the land is mostly devoted to rice paddy. Slightly further from the bank, at least around Haigam, there are extensive orchards.

Since Haigam Rakh is a shooting reserve the numbers of winter birds (especially ducks) are probably well documented. The first major survey of the summer bird populations of the reedbed was in 1978 (Holmes 1978). Since

then, various studies have been carried out at Haigam, including studies of the trophic structure (Pandit & Kaul 1981), production (Kaul 1982), freshwater snail ecology (Kaul *et al.* 1980) and feeding ecology of breeding birds (Pandit 1982).

It has become apparent that the Rakh is a very rich area, and is of major ornithological interest, not only for its wintering wildfowl but also for its breeding birds and for the large number of species that visit the site on migration. Until now, there has been little published detailed information on the avifauna of Haigam Rakh. The purpose of the present article is to rectify this, so as to provide a broader understanding of the ecology of this key wetland site.

The results presented here are a compilation of the results of expeditions to Haigam Rakh in 1978 (Holmes 1978) and 1983 (Holmes *et al.* 1983), together with some unpublished records for 1984 kindly provided by Peter Burns and Frances Goodwin. The periods of study were:

1978	9 July to 20 August (5 people)
1983	13 July to 20 August (5-7 people) 17-23 September (1 person)
1984	14-30 September (2 people)

All the expeditions have been based in Hanjypura village, on the western edge of the Rakh, where facilities were generously provided for us by the Kashmir Department of Game. As well as general observation, much time was devoted to ringing birds using the Rakh. Mist nets were set both along the boat channels in the main reedbed area, where they had to be erected and operated from punts, and along the Rakh edge. At the Rakh edge, nets were set both in the willow plantation and on an area (approximately 3 ha) of flooded grassland near Hanjypura, referred to as "the pond".

BIRDS OF HAIGAM RAKH

The following is a list of species recorded at Haigam Rakh. Several species for which we consider the records doubtful, have been omitted.

Status Code : B = Confirmed breeding
S = Suspected breeding
P = Passage migrant/
Winter visitor
U = Status uncertain

Tachybaptus ruficollis. Little Grebe (B)

Fairly common in the more open areas of the Rakh.

Ixobrychus minutus. Little Bittern (B)

Abundant in July/August. Only one confirmed sighting in September, an immature on 29/9/83.

Nycticorax nycticorax. Night Heron (S)

Often seen in small numbers flying over the Rakh, or sometimes in paddies, in the evening. Maximum in 1978 10, in 1983 5 on 27/7 (4 juveniles) and 9/8 (3 juveniles).

Ardeola grayii. Paddybird (U)

Singles recorded on 15/7/78, 18/7/78 and 10/7/83; the 1983 record was on the pond.

Egretta garzetta. Little Egret (U)

Recorded on the pond in 1983, with 2 on 13/8, then 1-2 daily until 20/8.

Egretta sp. (U)

Unidentified egrets were recorded on 18/7/83 (3 flying over) and 19/7/83 (single).

Ardea cinerea. Grey Heron (S)

Common. Regular activity in one area of the Rakh suggested reed-bed nesting. Up to 14 present on the pond at dawn on most days in 1983.

Anas platyrhynchos. Mallard (P)

Records of several on 26-27/7/78 and 2 on 15/8/83.

Anas acuta. Pintail (P)

Small numbers recorded in 1978 from 29/7.

Anas crecca. Teal (P)

The only confirmed records were a single on 19/9/84 and 2 on 21/9/84.

Anas querquedula. Garganey (P)

A single recorded on 19/9/84.

Anas sp. (P)

Records of unidentified ducks in 1978 comprised singles on 24/7, 26/7, 4/8 and 14/8, and a flock of c 50 on 19/8, all either Teal or Garganey, plus a flock of c 30 on 13/8. The only unidentified duck records in 1983 were a single on 8/8 and 3 on 14/8, all probably Mallard or Pintail.

(Aythya nyroca. Ferruginous Duck
(Formerly B)

Recorded as breeding at Haigam by Bates & Lowther (1952), but not seen in 1978 or 1983.)

Milvus migrans. Black Kite (B)

Common. Occasionally recorded fishing. In 1978 a pair nested in Hanjypura village.

Circus aeruginosus. Marsh Harrier (P)

1-2 female/immatures seen regularly over the Rakh in 1983, from 7/8 to 20/8, with 4 present on 17/8. Seen daily in 1984, with a maximum of 6 on 14/9.

Accipiter gentilis. Goshawk (P)

Singles recorded on 18/9, 23/9 and 28/9/84.

Falco subbuteo. Hobby (U)

Occasional records in 1983 of singles, often hunting in the swallow roost. In 1984 singles recorded on 23/9 and 28/9.

(Raptor sp.) (U)

In 1983 single large unidentified raptors were seen over the Rakh on four occasions during July, and on 23/9.

Rallus aquaticus. Water rail (B)

Abundant in the Rakh.

Porzana pusilla. Baillon's Crake (S)

Heard in the Rakh fairly frequently, and occasionally seen.

Porzana fusca. Ruddy Crake (S)

Trilling calls heard from rice paddy at dawn on several dates in 1983. At least 4 individuals present.

Gallinula chloropus. Moorhen (B)

Common in the Rakh in summer. In 1984 recorded on 28/9 (2) and 30/9.

Porphyrio porphyrio. Purple Gallinule

(Formerly S)

Recorded by Bates & Lowther (1952), but not seen during the recent studies.

Hydrophasianus chirurgus.

Pheasant-tailed Jacana (B)

Small numbers bred in 1978. In 1983 occasional records July, regular during August with up to 3 birds on flooded pasture at the edge of the Rakh. Probably a nest/young nearby. Numbers have declined since 1978, probably due to the increase in reed cover; at Hokasar in 1983 the species was common.

Rostratula benghalensis. Painted Snipe (S)

Two were trapped on 20/8/78. In 1983 4 records of 1-2 birds at the edge of the Rakh. included a male ringed on 2/8. Observed at dawn and dusk only.

Himantopus himantopus. Black-winged

Stilt (P)

One record in 1978 of a single on 21/8. In 1983 1-4 on the pond on most days from 5-19/8, then 22 on 20/8. In 1984 singles recorded on 21/9 and 28/9.

Recurvirostra avosetta. Avocet (P)

One called in briefly at the pond on 15/8/83.

Charadrius dubius. Little Ringed Plover (U)

A possible family party was seen on the pond intermittently during late July-August 1983.

Pluvialis dominica. Lesser Golden Plover (P)

An adult still in partial summer plumage was seen on the pond on 18/8/83.

Vanellus indicus. Red-wattled Plover (U)

One heard at the edge of the Rakh on 2/8/83.

Calidris minuta. Little Stint (P)

Often a few on the pond with *C. temminckii* during late July-August, with a maximum of 20 on 26/7/83 when few *C. temminckii* were present.

Calidris temminckii. Temminck's Stint (P)

Common on the pond during late July-August. Often 30+ present. Present 26-30/9/84, with a maximum of 10 on 28/9. Several small waders present between 17-20/9/83 were probably this species.

Calidris ferruginea. Curlew Sandpiper (P)

One on the pond from 2-5/8/83.

Philomachus pugnax. Ruff (P)

Four seen on the pond after heavy rain on 23/7/83. One present on 28/9/84.

Gallinago gallinago. Common Snipe (U)

A single trapped on 29/9/84.

Gallinago sp. (U)

Single unidentified snipes, either Common Snipe or Pintail Snipe (*G. stenura*), were recorded in 1978 from 14/8, occasionally drumming. In 1983 singles were seen flying over the Rakh on 27/7, 17/9 and 19/9. Up to 3 were present in September 1984.

Scolopax rusticola. Woodcock (P)

One on 17/8/78.

Tringa erythropus. Spotted Redshank (P)

An adult still in partial summer plumage flew over the Rakh on 13/8/83.

Tringa totanus. Redshank (P)

In 1978 2 recorded on 15/8. In 1983 13 flew over on 14/7 and records from the pond were one on 10/8 (ringed), 2 on 18/9 and one on 19/9.

Tringa nebularia. Greenshank (P)

Many records of singles during July/August, with 3 on 23/7/83. In 1984 singles were recorded on 16/9, 19/9 and 20/9/84.

Tringa ochropus. Green Sandpiper (P)

In 1978 3 were present on 13/8. In 1983 one on the pond on 15/8. In 1984 1-2 present daily from 23-30/9.

Tringa glareola. Wood Sandpiper (P)

Regular in small numbers on the pond from the last week of July to August. Largest numbers were 10 on 24/7/83 (flying over) and on 26/7/83. In 1984, 3-5 recorded daily from 21-30/9.

Tringa terek. Terek Sandpiper (P)

One caught before dawn on 21/8/78.

Tringa hypoleucos. Common Sandpiper (P)

In 1978 singles recorded on 8/8, 11/8, 17/8. In 1983 1-2 daily during August, on the pond, or other wet pasture. One present on 19/9/84.

Chlidonias hybrida. Whiskered Tern (B)

A common breeder in the Rakh. In 1978 there were about 30 pairs in 2 small colonies. In 1983 a maximum of 40 adults was seen on 28/7; fledged juveniles were recorded from 25/7 onwards.

Streptopelia orientalis. Rufous Turtle Dove (P)

A roost of up to 100+ present at the end of September 1984.

Streptopelia decaocto. Ring (Collared)

Dove (B)

Common, feeding on dry paddies. c 300 on 23/9/83.

Psittacula himalayana. Slaty-headed

Parakeet (U)

A roost was present in trees at the edge of the Rakh. Up to 100+ were seen flying over at dusk.

Cuculus canorus. Eurasian Cuckoo (S)

In 1978 adults were recorded calling until 11/8, with juveniles seen on 22/7 and 13/8. In 1983 there were several sightings of juveniles in July.

Strix aluco. Tawny Owl (U)

One heard calling on 15/7 and 16/8/78. An owl seen in 1983 (date not recorded) was probably this species.

Ceryle rudis. Lesser Pied Kingfisher (S)

Nearly daily sightings. In 1978 up to 4 seen, possibly a family party. In 1983 a family party of male, female and 4 young seen 11/8. A maximum of 3 recorded in September 1984.

Alcedo atthis. Common Kingfisher (B)

Abundant in summer, nesting in the earth banks around the Rakh. In 1983 still common in mid-September, but in late September 1984 the maximum daily total recorded was 3.

Pelargopsis capensis. Brown-capped Stork-billed Kingfisher (U)

One recorded on 16/8/78 could have been the same individual recorded by a WWF party at Hokasar, another game reserve.

Halcyon smyrnensis. White-breasted Kingfisher (S)

1-2 seen regularly.

Merops apiaster. European Bee-eater (U)

In 1978 a large passage of 50+ birds was recorded on both 19/8 and 20/8. In 1983 20-30 were seen in mid-July, feeding over the pond and paddies. One was seen on 31/7, then recorded regularly from 13-20/8 with a maximum of c 30. In 1984 recorded on 14/9 (10+) and 18/9.

Coracias garrulus. European Roller (B)

Seen in small numbers at several sites during July and August. Nine present on 17/9/84.

Upupa epops. Hoopoe (S)

Initially common; numbers declining during August, but singles still present on 19/9 and 23/9/83, and between 14-30/9/84.

Jynx torquilla. Wryneck (U)

In 1978 one was seen on 21/8. In 1983 one was caught in the plantation on 13/8 in the early stages of moult, and retrapped in the same site on 19/9 still in moult.

Picoides auriceps. Brown-fronted

Pied Woodpecker (S)

In 1978 recorded on 3/8 and 17/8. In 1983 fairly regular sightings of singles in willows around the Rakh. One male was trapped 15/8. In 1984 singles were recorded on 17/9, 19/9 and 27/9.

Picoides himalayensis. Himalayan

Pied Woodpecker (U)

In 1983 singles were recorded in willows on 29/7 and 5/8.

Picus squamatus. Scaly-bellied Green

Woodpecker (U)

In 1978 singles were recorded on 16/7, 20/7, 28/7 and 13/8. Only one record from 1983, of a single seen over the Rakh on 31/7.

Riparia paludicola. Indian Sand Martin (P)

All *Riparia* sp. identified were this species. Fairly common amongst Swallows at roost in July and August; a few feeding during the day over the Rakh. Largest catch of 24 on 30/7/83. Small numbers (5+) recorded in late September 1984.

Hirundo rustica. Swallow (B, P)

Breeds in houses in Hanjypura village. Large roost of several thousand near edge of Rakh; numbers slowly decreasing during August. A small roost was still present in mid-September 1983. In 1984 30+ recorded on 14/9 decreased

to the last sighting of 2 on 28/9. Most adults, and many juveniles, were in moult, with the moult score increasing as the autumn progressed. This is in contrast to western *H. rustica rustica* (the same subspecies) which do not moult until they reach the winter quarters (Ginn & Melville 1983).

Anthus trivialis. Tree Pipit (P)

One caught at the edge of the Rakh on 19/9/83. Three pipits seen on 23/9/83 were possibly this species.

Anthus sp. (U)

Unidentified pipits were seen on 25/7/78 (2) and 28/9/84.

Motacilla citreola. Citrine Wagtail (S, P)

Fewer than *M. alba* during early July, but increasing from the last week of July to become the commoner wagtail. In 1978 a large roost was present near the pond from mid-August; in 1983 this roost was somewhat smaller and formed later. Some individuals trapped were in a very worn juvenile plumage, usually with a brood patch. It is thought that these were mostly first summer females which, for some reason, had not moulted into adult plumage. Ali & Ripley (1983) state that some first summer males breed in the juvenile plumage. A second year male ringed on 21/8/78 was retrapped on 25/9/84.

Motacilla cinerea. Grey Wagtail (P)

Singles recorded on five dates between 15-28/9/84.

Motacilla alba. Pied Wagtail (S, P)

Relatively few were present in early July, but numbers increased during late July and August, with many still present in September. Mainly seen by the pond.

Pericrocotus ethologus. Long-tailed

Minivet (U)

Uncommon; only recorded in 1983. Two present in willows on 10/7, and a few later records during July/August.

Pycnonotus leucogenys. White-cheeked

Bulbul (B)

Common around habitation.

Erithacus svecicus. Bluethroat (P)

The earliest record was on 8/8/83 (an adult male), with numbers building up rapidly during mid-August. Abundant during September. Occupied both the middle of the Rakh and the willows around the edge. In 1984 became more abundant towards the end of September.

Saxicola torquata. Collared Bush Chat

(Stonechat) (P)

A male was seen in the Rakh on 15/8/83. Two were present on 23/9/83.

Saxicola caprata. Pied Bush Chat (U)

An adult female with a brood patch was trapped in the Rakh on 24/7/83.

Turdus unicolor. Tickell's Thrush (B)

Common around the Rakh in summer. Only one record in 1984, on 23/9.

Hippolais caligata rama. Syke's Warbler (P)

A yearling was trapped on 16/8/78.

Acrocephalus concinens. Swinhoe's Reed

Warbler (B)

Breeds in small numbers in the Rakh, often near isolated willows. About 10 territories found. Fledged young were caught on 29/7 and 14/8/83. Only caught in the Rakh.

Acrocephalus agricola. Paddyfield Warbler (P)

A yearling was caught in the Rakh on 17/8/83.

Acrocephalus dumetorum. Blyth's Reed

Warbler (P)

A yearling was caught in the plantation on 13/8/83.

Acrocephalus stentoreus. Clamorous Reed

Warbler (B)

An abundant breeder in the Rakh. Many individuals feed in the willows around the edge of the reeds. Two adults (one male, one

female) ringed in 1978 were retrapped in 1983. Very few were present from 17-20/9/83, and in 1984 the only record was of 2 on 14/9.

Sylvia curruca. Lesser Whitethroat (P)

One trapped in the plantation on 19/9/83.

Phylloscopus collybita. Chiffchaff (P)

In 1984 2-3 recorded daily from 24-30/9, with 6 ringed.

Phylloscopus sindianus. Mountain

Chiffchaff (P)

Recorded on 29/9 and 30/9/84, with a total of 4 trapped.

Phylloscopus inornatus. Yellow-browed

Warbler (P)

Singles were caught in the plantation on 18/9 and 19/9/83, and 20/9 and 30/9/84.

Phylloscopus trochiloides. Greenish

Warbler (P)

In 1978 4 individuals trapped, on 10/8, 13/8, 18/8 and 19/8 (2 present). In 1983 single yearlings were trapped in the plantation on 16/8 and 18/9. One was trapped on 26/9/84.

Phylloscopus sp. (U, P)

An unidentified leaf warbler was seen in the willows on 20/7/78. Several unidentified *Phylloscopus* warblers were seen during mid-September 1983.

Muscicapa superciliaris. White-browed Blue

Flycatcher (P)

A juvenile male was trapped in the plantation on 18/9/83. A female was trapped on 19/9/84 and was still present on the next two days, and a juvenile male was trapped on 22/9/84.

Terpsiphone paradisi. Paradise Flycatcher (B)

Seen daily during July and August. Present in two sites at the edge of the Rakh, and in Hanjypura village. At one site on 12/7/83 a breeding male was seen with a female and a first/second summer male, suggesting co-operative breeding. One still present on 20/9/84.

Parus major. Grey Tit (B)

Common, with several family parties caught.

Certhia sp. (P)

A treecreeper was recorded in September 1984 (exact date not recorded). It is likely that this was a Himalayan Treecreeper, *C. himalayana*.

Oriolus oriolus. Golden Oriole (B)

Common in mature trees around the Rakh. Still present in mid-September 1983.

Lanius schach. Rufous-backed Shrike (B)

A common breeder around the Rakh. One was seen feeding a cuckoo fledgling on 24/7/83. The only records in 1984 were singles on 15/9 and 26/9.

Dicrurus adsimilis. Black Drongo (U)

Singles were recorded on 17/7/78, and in Hanjypura village on 18/9/83.

Corvus splendens. House Crow (S)

Common. Often seen in the Rakh itself.

Corvus macrorhychos. Jungle Crow (U)

Two records in July 1983.

Corvus monedula. Jackdaw (S)

Fairly common, with a maximum of 33 recorded on 23/9/84.

Sturnus vulgaris. Starling (S)

Fairly common. A flock of c 150 present on 4/8/83, and 50+ recorded on 14/9/84.

Acridotheres tristis. Common Myna (B)

Fairly common.

Passer domesticus. House Sparrow (B)

Very common. Large flocks (up to 700+) were recorded feeding in paddies.

Lonchura punctulata. Spotted Munia (U)

A single was trapped on 11/8/78.

Carduelis carduelis. Eurasian Goldfinch (P)

A party of 5 was recorded on 19/8/83.

Carpodacus erythrinus. Common Rosefinch (P)

In 1978 an adult male was trapped on 16/8. In 1983 a medium-sized flock was present in the plantation during mid-September, with 39 caught in two days. Four individuals recorded on 22-23/9/84.

DISCUSSION

The list of 92+ species of birds recorded at Haigam is undoubtedly incomplete, especially since so little study has been undertaken during migration periods (none at all in spring). Many of the forest breeding altitude migrants will probably be recorded in due course, as well as additional trans-Himalayan migrants. Similarly, although we have not had access to official figures, the variety of ducks using the site in winter must exceed that recorded here. There are also likely to be species other than waterfowl wintering in the reserve area.

Our studies have demonstrated that the ornithological importance of Haigam Rakh extends beyond its winter wildfowl. There are very high densities of several breeding marshland birds, e.g. Little Bittern, Water Rail, Kingfisher and Clamorous Reed Warbler. There are also significant populations of Baillon's Crake, Whiskered Tern and the very local Swinhoe's Reed Warbler. In addition, the area is important as a feeding area for large numbers of migrants which pass through in autumn. This includes an impressive variety of waders, and also both short and long distance passerine migrants. The area may be particularly important to long distance migrants, providing a feeding and stopping-off site after the rigours of a trans-Himalayan crossing. Large numbers of hirundines and wagtails also use the Rakh as a roosting and moulting area.

We consider the Rakh of sufficient interest for it to be of benefit to establish there a permanent ringing station, to continually monitor the number of birds visiting the site.

There is an increasing awareness in Kashmir

of the need to preserve the local environment. This is not just for the welfare of the wildlife, but also for more practical reasons. If Haigam Rakh was not a reserve, it would quickly be drained for paddy, and some encroachment has already taken place. At present the Rakh has many uses apart from its value as a source of income to the Game Department from the shooting. Local people harvest the reeds for thatching and mat-making. The vegetation is used as cattle feed, with the cattle sometimes driven into the Rakh itself to feed. Villagers catch fish in the open water areas. The willows planted around the edge, as well as acting as a silt trap, will in due course be a source of firewood for the local people. As well as this, the shooting provides employment for many local people, as guards, boatmen and general labourers.

The Rakh has three very important functions. It is a large area of renewable resources, providing a living to many local people. It is a well-managed shooting reserve, providing income to the Department of Game. Finally, but equally important, it is an area of outstanding conservation interest. With strict management there is no reason why there should be a conflict between these functions.

Indeed, if the Rakh disappeared through siltation and conversion to agriculture this would be detrimental to local interests as well as to the conservation and shooting interests. However, for management and conservation to be effective, the co-operation and goodwill of the local people is essential.

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